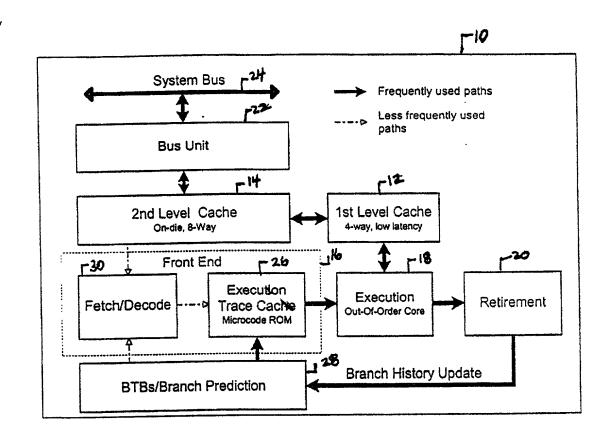
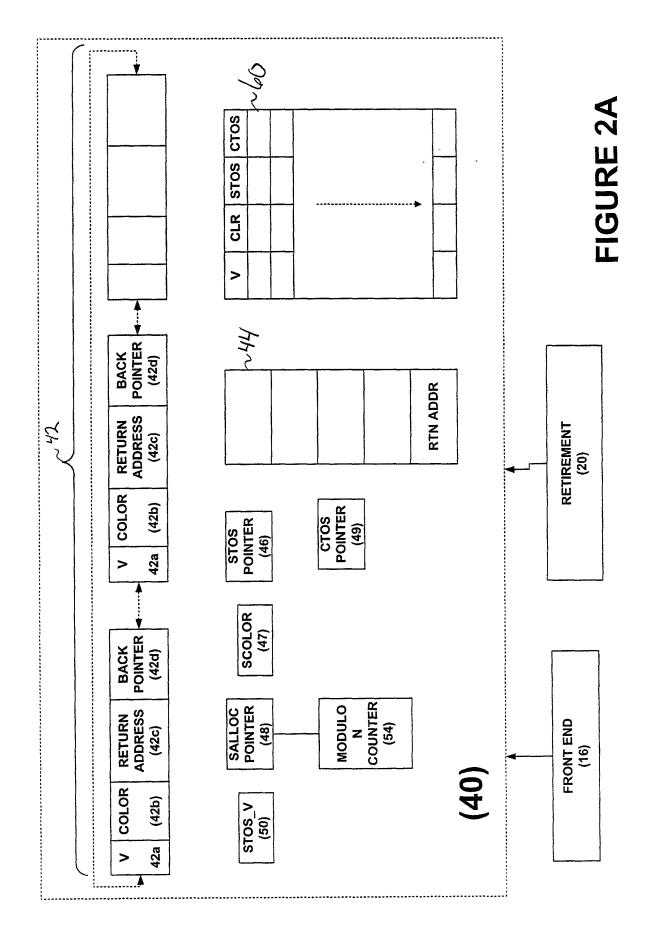
4004 has 1 1000 to 2005 1111 1111 (1) (1) (1)



F1G, 1



Applin No.: Not Yet Assigned Applicant(s): Stephen J. Jourdan et al. RETURN ADDRESS STACK

Page 2 of 8

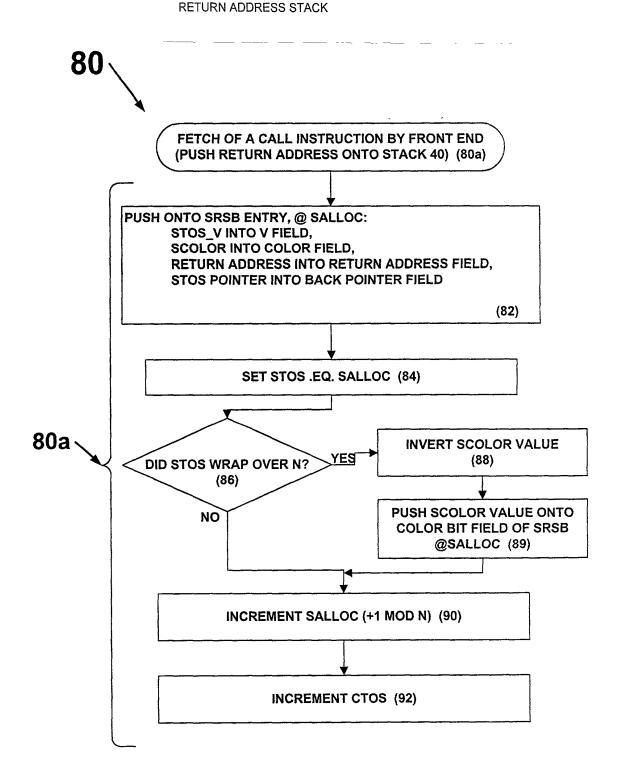


FIGURE 2B

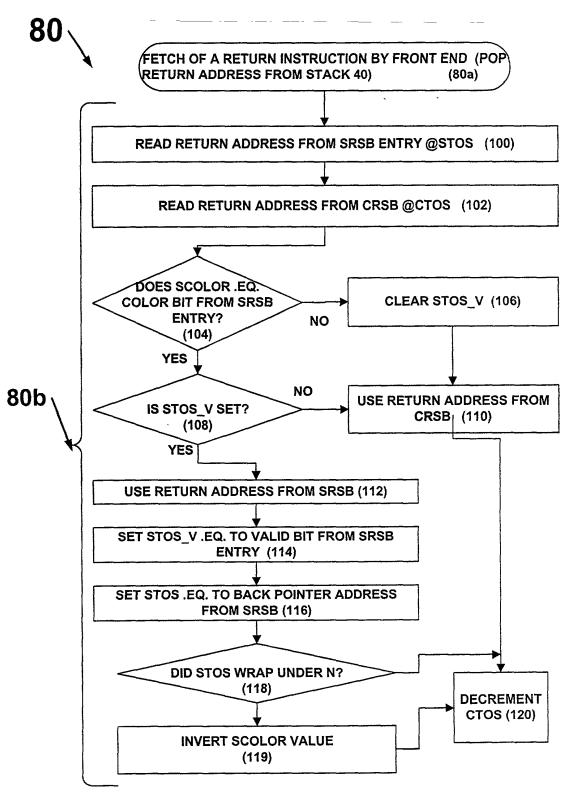


FIGURE 2C

Appln No.: Not Yet Assigned Applicant(s): Stephen J. Jourdan et al. RETURN ADDRESS STACK

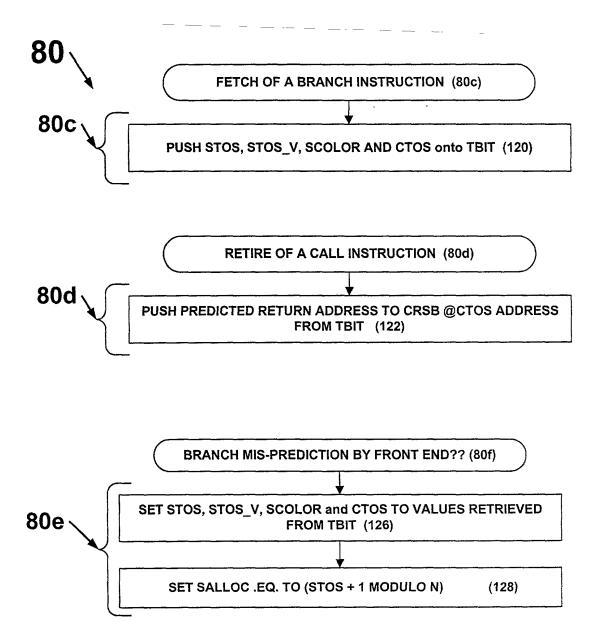
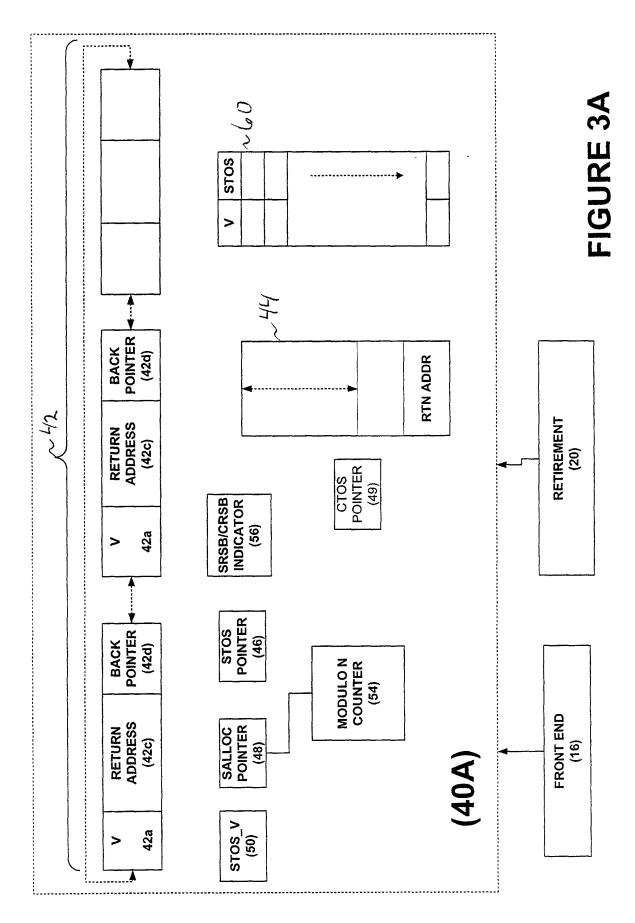


FIGURE 2D



Appln No.: Not Yet Assigned Applicant(s): Stephen J. Jourdan et al. RETURN ADDRESS STACK

Page 6 of 8

Applicant(s): Stephen J. Jourdan et al. RETURN ADDRESS STACK 140 FETCH OF A CALL INSTRUCTION BY FRONT END (PUSH RETURN **ADDRESS ONTO STACK 40)** (140a) PUSH ONTO SRSB ENTRY, @ SALLOC: (141)RETURN ADDRESS INTO RETURN ADDRESS FIELD, STOS POINTER AND SRSB/CRSB INDICATOR INTO BACK POINTER FIELD 140a SET V-BIT FIELD IN SRSB ENTRY @SALLOC (142) SET STOS .EQ. SALLOC (144) INCREMENT SALLOC (+1 MOD N) (146) FETCH OF A RETURN INSTRUCTION BY FRONT END (POP RETURN **ADDRESS FROM STACK 40)** (140b) DOES STOS POINT TO YES ÍS ENTRY IN SRSB NO CRSB? @STOS VALID? (148)(150)140b YES NO **READ RETURN ADDRESS FROM READ RETURN ADDRESS FROM SRSB** CRSB @STOS (156) ENTRY @STOS (152) SET STOS TO CONTENTS OF BACK **DECREMENT STOS (-1 MOD N)** POINTER FIELD FROM SRSB (154) (158)

Appln No.: Not Yet Assigned

FIGURE 3B



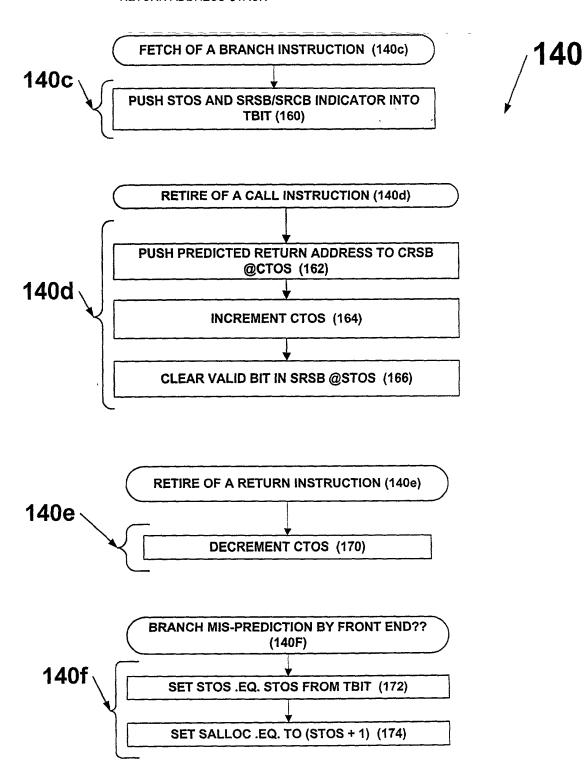


FIGURE 3C